

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: Zari Hariri

GENERAL INFORMATION:

Name:	Huntington Alloys Corporation
Address:	29500 Mayo Trail Road Burnaugh, KY 41129
Date application received:	6/2/2005
SIC Code/SIC description:	3356, Rolling, Drawing, and Extruding of Nonferrous Metals, Except Copper and Aluminum
Source ID:	21-019-00013
Agency Interest:	329
Activity:	APE20060001
Permit:	F-07-048

APPLICATION TYPE/PERMIT ACTIVITY:

<input checked="" type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input checked="" type="checkbox"/> Conditional major
__Administrative	<input type="checkbox"/> Title V
__Minor	<input checked="" type="checkbox"/> Synthetic minor
__Significant	<input checked="" type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☒ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☐ Certified by responsible official
- ☐ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Potential (tpy)	Actual (tpy) ²	Allowable (tpy)
PM/PM ₁₀	216/218	3.08/3.08	<90
SO ₂	0.23	0.04	NA
NO _x ¹	38.3	9.82	NA
CO	32.2	2.14	NA
VOC	2.46	0.21	NA
Single HAPs > 9 tpy Nickel (CAS# 7440-02-0) Chromium (CAS# 7440-47-3)	23.9 79.3	0.001 0.0002	< 9
Source wide HAPs > 22.5 tpy	79.3	0.53398	< 22.5

1. As NO₂ in KY EIS 2006 report.

2. Actual emissions are from the Kentucky Division for Air Quality's 2006 Emissions Inventory report.

SOURCE DESCRIPTION:

Huntington Alloys Corporation (Huntington Alloys) owns and operates a nickel alloys manufacturing facility, located in Burnaugh, Kentucky. Huntington Alloys manufactures nickel and high-nickel alloys in various shapes, ingots, billets and tubing. Manufacturing processes at the site include melting of metals to produce alloy ingots; extruding and tube-reducing to form tubing products; heat-treating to aid processing and improve physical characteristics of the formed product.

Manufacturing portions of the facility consist of three main buildings, these are: a raw materials building (Building 02, Department 40) where raw materials are melted down in an air induction furnace and shaped into molds; an extrusion building (Building 03, Department 50) where rods are processed into tubes; and the special projects building (Building 01, Department 30) where metal powders are blended and processed through an attritor to form semi-finished products. The Standard Industrial Classification (SIC) Code for this source is 3356, *Rolling, Drawing, and Extruding of Nonferrous Metals, Except Copper and Aluminum*.

Huntington Alloys is currently operating under permits C-83-99, issued on July 1, 1983, C-86-032, issued on January 21, 1986, C92-016, issued on January 16, 1992, and S-95-254, issued on December 4, 1995. A request for renewal of S-95-254 as a source-wide operating permit was received by the Division on June 5, 2005, and a subsequent request to construct a new electroslag remelting furnace on July 3, 2006. The permittee has requested the continuance of previously established voluntary limits on production such that the potential to emit (as defined in 401 KAR 52:001, Section 1 (56)) of particulate matter (PM/PM₁₀), any single hazardous air pollutant (HAP) and the combination of HAPs remains less than established major source thresholds. This operating approval is the initial Conditional Major Permit issued to this source pursuant to the provisions of 401 KAR 52:030, *Federally Enforceable Permits for Nonmajor Sources*. Due to the removal of previously approved equipment, i.e., EP 02(02) - electroflux remelt furnace; EP 04(18) - boiler, Dept. 30; EP 06(20) - boiler, Dept. 40; EP 16(15,16) - grinding; EP 20(04) - induction furnace; and EP 21(03) - shell mold oven; the installation of new EP 27 (electroflux remelt furnace) which commenced operation on

February 26, 2007; and the continued use of particulate emissions control equipment, the prior voluntary limits on material usage and production are revised such that the source shall be in compliance with the prescribed emission limits provided in Section D of the permit.

EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

To preclude the applicability of 401 KAR 52:020, *Title V permits*, the total annual source-wide emissions shall not exceed the following limitations on a twelve (12) consecutive month basis:

- a. Particulate matter (PM/PM₁₀) emissions: 90 tons per twelve (12) consecutive month basis;
- b. Any single hazardous air pollutant (HAP): 9 tons per twelve (12) consecutive month basis;
and
- c. Combined hazardous air pollutant (HAPs): 22.5 tons per twelve (12) consecutive month basis.

The permittee shall continue to apply voluntary limits on material usage and use of particulate control devices (baghouse for EP 18, 23, 25, 26, and 27; fume control for EP 07, EP 08, EP 09, EP 10, EP 11, EP 12) in order to comply with the specified emission limits. Related enforceable monitoring, record keeping and reporting requirements are included in the permit. The potential to emit all other criteria pollutants will be less than 100 tons per year each. Since this source is one of the 28 listed source categories, compliance with these permit limits shall also preclude this source from being a major stationary source and the requirements of 401 KAR 51:017, *Prevention of Significant Deterioration of Air Quality* are not applicable to this source.